In the claims:

Claim 1 cancelled.

2.   (Currently amended) ~~The method according to claim 1~~ A
method for operating an internal combustion engine (10), wherein:

at least one outlet valve (36) is opened with the aid of an actuator
upon termination of a working stroke, thereby releasing exhaust gas from at
least one combustion chamber (14);

a pressure value is determined which is indicative of the gas pressure
in the combustion chamber (14) during the working stroke;

characterized in that:

an actual value (hact) of the lift of the outlet valve (36) is determined
together with actual operating parameters (tm, Toil, Poll, nmot, wao, pabg)
of the internal combustion engine that affect the valve lift (hact); and

an actual gas pressure (paoact) of the gas pressure in the combustion
chamber (14) at the time of an opening of the outlet valve (36) is determined
at least approximately based on the determined actual valve lift (hact) of the
outlet valve (36) and the determined actual operating parameters (tm, Toil,
Poil, nmot, wao, pabg) of the internal combustion engine (10), wherein on the
basis of a set of operating parameters (BG) of the internal combustion
engine (10) which are effective for a future working stroke, an estimated gas

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pressure (paopred) in the combustion chamber (14) is determined for the future working stroke, wherein termination of this working stroke, the estimated gas pressure (paopred) determined for this working stroke is compared with the actual gas pressure (paoact) determined for the same this working stroke, and wherein, depending on a result of the comparison, a method (func paopred) is adapted by means of which the estimated gas pressure (paopred) is determined.

3.   (Currently amended) The method according to claim 1 A method for operating an internal combustion engine (10), wherein:

at least one outlet valve (36) is opened with the aid of an actuator upon termination of a working stroke, thereby releasing exhaust gas from at least one combustion chamber (14);

a pressure value is determined which is indicative of the gas pressure in the combustion chamber (14) during the working stroke;

characterized in that:

an actual value (hact) of the lift of the outlet valve (36) is determined together with actual operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine that affect the valve lift (hact); and

an actual gas pressure (paoact) of the gas pressure in the combustion chamber (14) at the time of an opening of the outlet valve (36) is determined at least approximately based on the determined actual valve lift (hact) of the

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outlet valve (36) and the determined actual operating parameters (tm, Toil, Poil, nmot, wao, ɢabg) of the internal combustion engine (10), wherein on the basis of a set of operating parameters (BG) of the internal combustion engine (10) for a future working stroke, an estimated gas pressure (paopred) in the combustion chamber (14) is determined, wherein, after termination of this working stroke, the estimated gas pressure (paopred) determined for this working stroke is compared with the actual gas pressure (paoact) determined for ~~the same~~this working stroke, and wherein, depending on a result of the comparison, a piece of information (INF) is issued.

4.   (Currently amended) ~~The method according to claim 1~~ A method for operating an internal combustion engine (10), wherein:

at least one outlet valve (36) is opened with the aid of an actuator upon termination of a working stroke, thereby releasing exhaust gas from at least one combustion chamber (14);

a pressure value is determined which is indicative of the gas pressure in the combustion chamber (14) during the working stroke;

characterized in that:

an actual value (hact) of the lift of the outlet valve (36) is determined together with actual operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine that affect the valve lift (hact); and

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an actual gas pressure (paoact) of the gas pressure in the combustion chamber (14) at the time of an opening of the outlet valve (36) is determined at least approximately based on the determined actual valve lift (hact) of the outlet valve (36) and the determined actual operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine (10), wherein the actual gas pressure (paoact) is determined by means of the following formula:

$$paoact = -\frac{C1}{2*C2} + \sqrt[2]{\left(\frac{C1}{2*C2}\right)^2 + \frac{hact - C0}{C2}}$$

wherein C0, C1, and C2 are coefficients, which depend at least in part on the operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine (10) affecting the valve lift (hact) of the outlet valve (36), and wherein hact is the determined actual value of the valve lift.

5.   (Currently amended) ~~The method according to claim 1~~ A method for operating an internal combustion engine (10), wherein:

at least one outlet valve (36) is opened with the aid of an actuator upon termination of a working stroke, thereby releasing exhaust gas from at least one combustion chamber (14);

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a pressure value is determined which is indicative of the gas pressure in the combustion chamber (14) during the working stroke;

characterized in that:

an actual value (hact) of the lift of the outlet valve (36) is determined together with actual operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine that affect the valve lift (hact); and

an actual gas pressure (paoact) of the gas pressure in the combustion chamber (14) at the time of an opening of the outlet valve (36) is determined at least approximately based on the determined actual valve lift (hact) of the outlet valve (36) and the determined actual operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine (10), wherein the actual gas pressure (paoact) is determined by ~~means of~~ the following formula:

$$paoact = (C1*hact-C0) + C2 * (hact-C0)^2$$

wherein C0, C1, and C2 are coefficients that depend at least in part on the operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine (10) affecting the valve lift (hact) of the outlet valve (36), and wherein hact is the determined actual value of the valve lift.

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6.   (Currently amended) The method according to claim 4, wherein at least one of the coefficients C0, C1, and C2 is determined by ~~means of a~~ polynomial (func_C0, func_C1, func_C2) with linear and quadratic terms which depend on operating parameters (tm, Toll, Poll, nmot, wao, pabg) of the internal combustion engine (10) affecting the valve lift (hact).

7.   (Currently amended) The method according to claim 4, wherein at least one of the coefficients C0, C1, and C2 is determined by ~~means of a~~ characteristic map, which depends on operating parameters of the internal combustion engine (10) affecting the valve lift (hact).

8.   (Currently amended) ~~The method according to claim 1~~ A method for operating an internal combustion engine (10), wherein:

at least one outlet valve (36) is opened with the aid of an actuator upon termination of a working stroke, thereby releasing exhaust gas from at least one combustion chamber (14);

a pressure value is determined which is indicative of the gas pressure in the combustion chamber (14) during the working stroke;

characterized in that:

an actual value (hact) of the lift of the outlet valve (36) is determined together with actual operating parameters (tm, Toll, Poll, nmot, wao, pabg) of the internal combustion engine that affect the valve lift (hact); and

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an actual gas pressure (paoact) of the gas pressure in the combustion chamber (14) at the time of an opening of the outlet valve (36) is determined at least approximately based on the determined actual valve lift (hact) of the outlet valve (36) and the determined actual operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine (10), wherein the operating parameters used in the computation of an actual value (paoact) of the gas pressure in the combustion chamber (14) at the time of an opening of the outlet valve (36) include an actuation time (tm) of a control device (46) of the outlet valve which is applied for the desired valve lift, a rotational speed (nmot) of a crank shaft (20), an angular position (wao) of the crank shaft (20) at the time of the opening of the outlet valve (36), a mean pressure (pabg) of the exhaust gas downstream of the outlet valve (36) at the time of the opening of the outlet valve (36), a temperature (Toil) of a hydraulic fluid with which the outlet valve (36) is actuated, a pressure (Poil) of the hydraulic fluid, and/or a mass of a working gas enclosed in the combustion chamber.

Claims 9-13 cancelled.

14.   (Currently amended) The method according to claim 5, wherein at least one of the coefficients C0, C1, and C2 is determined by ~~means of a~~ polynomial (func_C0, func_C1, func_C2) with linear and quadratic terms

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which depend on operating parameters (tm, Toil, Poil, nmot, wao, pabg) of the internal combustion engine (10) affecting the valve lift (hact).

15.   (Currently amended) The method according to claim 5, wherein at least one of the coefficients C0, C1, and C2 is determined by means of a characteristic map, which depends on operating parameters of the internal combustion engine (10) affecting the valve lift (hact).

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